Amendments to the Specification:

Please replace paragraph [006] with the following amended paragraph:

An alternative configuration for gate electrode dielectric layers is a composite laminate dielectric layer made of two or more layers of different materials. Thin (about 10 nm) nanolaminate dielectric materials made of layers of tantalum oxide and hafnium oxide (Ta_2O5-HfO_2), tantalum oxide and zirconium oxide (Ta_2O_5-ZrO_2) or zirconium oxide hafnium oxide (ZrO_2-HfO_2) deposited on a silicon substrate by ALD were characterized for possible gate dielectric applications by Zhang *et al, J. App. Physics,* 87 (4) 1921-1924 (2000). The dielectric constants of these films were in the range of 12-14 and the leakage currents were in the range of 2.6×10^{-8} to 4.2×10^{-7} A/cm^{-2} at 1.0 MV/cm electric field.

Please replace paragraph [024] with the following amended paragraph:

One factor to consider in selecting the relative thickness of layers to use is roughness of the ZrO_2 layer 14. The ZrO_2 layer 14 has a smooth, cubic ZrO_2 crystalline structure (c-ZrO_2) within the first 5 nm when deposited by RS-ALD as describe hereafter. This smooth structure transitions to a more rough, tetragonal crystalline structure (t-ZrO_2) as the layer is made thicker. Accordingly, in high density embodiments, such as in MOS gate dielectric layers where a relatively smooth ZrO~~2~~$_2$ layer is desirable, the ZrO_2 layer 14 should be less than about 5 nm in thickness. In capacitor applications where the smoothness of the ZrO_2 layer is less critical, the ZrO_2 layer 14 can be made thicker than the lanthanide oxide layer 16 to achieve a higher dielectric constant.

Please replace paragraph [041] with the following amended paragraph:

The temperature of the substrate 96 and chamber environment is controlled by a heater 106 assembly that may include an optional reflector 97 in proximity to the substrate 96. The temperature in the chamber is raised to about 200~~0~~ °C to ensure efficient e-beam evaporation and deposition of the lanthanide oxide 102. An oxygen distribution ring 108 is located below the shutter 100. The oxygen distribution ring is a manifold that distributes oxygen around the surface of the substrate 96 at final pressure of about 10^{-7} Torr. The electron beam evaporation chamber 90 is configured with a vacuum pump 110 for evacuating the chamber to a pressure of about 10^{-6} Torr or less. Oxygen pressure in the chamber is regulated by oxygen control regulator

112. A small amount of oxygen is needed in the chamber to ensure that the deposited layer of lanthanide oxide is completely oxidized because the process of e-beam evaporation tends to degrade the oxidation stoichiometry of the lanthanide oxide material 102. Optional detectors or monitors may be included on the interior or exterior of the chamber 90, such as an interiorly situated detector 114 for detecting the thickness of the layer and the exteriorly situated monitor 116 for displaying the thickness of the layer. The lanthanide oxide layer 16 is formed to a suitable thickness of 2-10 nm on the surface of the substrate or ZrO_2 layer 14 by controlling the duration of electron beam evaporation.